

Izod Charpy Impact Testing Machine (EDC-SM-109)

EXPERIMENTAL DATA:

- Determine the notched-bar impact work and strength
- Analyse the fracture surface characteristics
- Influence of notch shape, material and specimen temperature on the notched bar impact work



DESCRIPTION:

A sturdy ground-fitted unit for the study of notched bar (Charpy) impact strength tests. The heavy steel base plate has an anvil and pillar which have replicable impact profiles for supporting the notched specimens prior to testing.

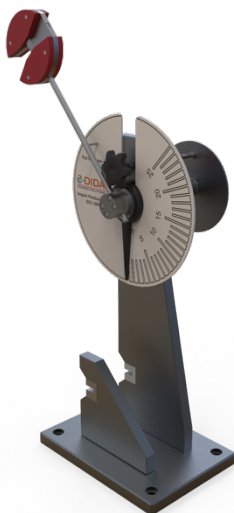
A weight-calibrated hammer swings around the pivot. The potential energy stored in the hammer can be varied using supplied weight sets. A lock and pin mechanism holds the hammer in its place. As the pin is released, hammer swings and impact on the test specimen. A pointer coupled with the hammer travels along upon specimen breakage. The pointer denotes the change in potential energy that has been absorbed by the impact. The marker remains in position following specimen fracture to enable the value to be recorded.

A number of test specimens are provided, with further specimens available separately. The specimens are manufactured to specific notched specifications and are provided in steel, aluminium and brass.

A PC data acquisition (EDSM-109S) is also available (Optional).

TECHNICAL SPECIFICATIONS:

- Work Capacity: 15Nm , 25Nm with weights
- Hammer Head: 745mm
- Hammer Weight: 2.05Kg
- Additional Weights: 4 x 0.342Kg
- Support for specimen: 40mm



RELATED LAWS:

- Charpy Test
- Impact Testing
- Strength of Materials
- Fracture
- Conversion of Energy
- Absorbed Energy

SCOPE OF DELIVERY:

- 1 x EDC-SM-109
- 4 x Additional Weights
- 10 x Test Specimen
- 1 x Instructional Manual
- EDSM-109S optional.

WEIGHT AND DIMENSIONS:

- L x W x H (mm): 450 x 300 x 1000
- Weight (approx): 65 kg